REMARKS

This amendment, submitted in response to the Office Action dated December 23, 2002, is believed to be fully responsive to each point of rejection raised therein. Accordingly, favorable reconsideration on the merits is respectfully requested.

Claim 1 is rejected under 35 U.S.C. § 102(b) as being anticipated by Suzuki et al (USP 4,784,905), Kuehrle (USP 4,792,860) or Hsieh (USP 5,817,264). Claims 1, 4, 7 and 8 have been rejected under 35 U.S.C. § 103(a) as being unpatentable over Suzuki, Kuehrle, or Hsieh. Claims 2 and 6 have been rejected under 35 U.S.C. § 103(a) as being unpatentable over Yamaguchi et al (USP 5,716,477). Claim 3 is rejected under 35 U.S.C. § 103(a) as being unpatentable over Suzuki, Kuehrle, or Hsieh in view of applicant's statement of the prior art or Shinji (JP 09169165). Claim 5 is rejected under 35 U.S.C. § 103(a) as being unpatentable over Yamaguchi in view of applicant's statement of prior art or Shinji. Claims 3, 5, and 7-16 have been canceled. Applicant submits the following arguments in traversal of the rejections.

Rejection of Claim 1

The Examiner cites Suzuki, Kuehrle, or Hsieh for anticipating claim 1, maintaining that they disclose an image formation layer containing permanent yellow organic pigment.

Applicant has amended claim 1 to include the features of claim 3, consequently canceling claim 3. Since the light heat conversion layer as described in claim 3 was previously before the Examiner, any new rejection should be made on a non-final basis.

Also, an apparatus consistent with claim 1 would include an image formation layer on a support wherein the image formation layer includes an organic pigment having a melting point

not less than 310°C. The specification discloses that organic pigments having a melting point not less than 310°C include Permanent Yellow GG02.

Although Kuehrle does disclose the use of Permanent Yellow GG02, it is in the context of ink which is stored in a solid bar 148 and not on an image formation layer disposed on a support as described in claim 1. Column 16, lines 24-60. Therefore, Kuehrle does not anticipate claim 1.

The Examiner maintains that Suzuki, Kuehrle or Hsieh in view of applicant's statement of prior art or Shinji make claim 3 unpatentable and that Yamaguchi in view of applicant's statement of prior art or Shinji makes claim 5 unpatentable. Neither the Abstract of Katsuyuki (JP 9052458) nor Masahide (JP 9142044) appear to disclose a light-heat conversion layer. Shinji mentions that a separation sheet is located between the light-heat conversion layer of the thermal transfer sheet and the thermal transfer layer in a laser beam irradiation area. See Abstract. It goes on to say that a part of the heat separation layer contained in the light-heat conversion layer is decomposed. Nothing appears to be mentioned about the absorbance of the light-heat conversion layer in the near infrared region. Therefore, the subject matter of claim 3 which is now in newly amended claim 1, should be deemed patentable.

For the above reasons, claim 1 should be deemed patentable.

Rejection of Claims 1, 4, 7 and 8

The Examiner cites Suzuki, Kuehrle or Hsieh for disclosing the elements of claims 1, 4, 7, and 8. Claims 7 and 8 have been canceled.

Claim 1 and dependent claim 4 are patentable over Hsieh and Kuehrle for the reasons set forth above.

In addition, with respect to claim 4, the Examiner maintains that experimental modification of the prior art in order to ascertain optimum conditions renders applicant's claims unpatentable in the absence of unexpected results. Office Action at p 1.

Neither Suzuki, Kuehrle, nor Hsieh, mention the softening point of an organic pigment or the softening point of an amorphous organic polymer. It is unclear where in the references such elements of claim 4 were disclosed, particularly since the Examiner made a general statement without citing examples in the references. Assuming arguendo that Suzuki, Kuehrle or Hsieh did indicate an image formation layer, they do not indicate the weight of the organic pigment and the amorphous organic polymer in the image formation layer. Hsieh indicates that the pigment concentration in the pigment solution is from about .0005 to 50 based on the total weight of the solution. But this does not appear to include an organic pigment and an amorphous organic polymer as described in claim 4. Suzuki does not appear to disclose an amorphous organic polymer either, let alone its weight in an image formation layer. This would lead one to the conclusion that Suzuki and Hsieh did not think that the softening point of an organic pigment or and an amorphous organic polymer or the thickness of the image formation layer is significant nor a feature to be optimized.

Also, none of the references indicate that the thickness of the image formation layer be between .2 to 1.5μm. As stated above, Kuerhle does not disclose an image formation layer of claim 1. Suzuki indicates that the thickness of the thermofusible ink layer be 2-30μm, preferably 4-10μm (column 29, lines 28-30), which is larger than that of the present invention. Hsieh mentions the thickness of a pigment layer which is dispersed over a support as being between .01μm to 50μm (column 4, lines 13-19), but does not indicate the thickness of the entire image

formation layer. Since the thickness range of the image formation layer of the present invention is not disclosed in the prior art, claim 4 is patentable.

Rejection of Claims 2 and 6

The Examiner cites Yamaguchi for disclosing the elements of claims 2 and 6. Claim 2 has been amended to be dependent upon claim 1. Therefore, claims 2 and 6 are patentable for the reasons set forth above. In addition, since claim 6 describes the softening range of an organic pigment and of an amorphous organic polymer and the thickness of an image formation sheet, it is patentable for the same reasons discussed in claim 4.

Rejection of Claims 3 and 5

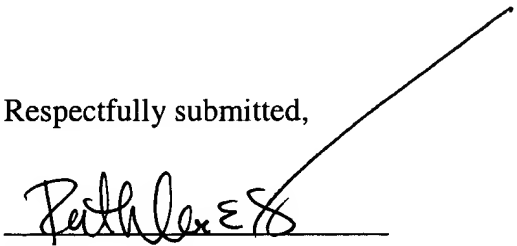
Claims 3 and 5 have been canceled. Claim 1 has been amended to include the features of claim 3.

Also, Applicant has added claims 17-27 to describe the invention more particularly.

In view of the above, reconsideration and allowance of this application are now believed to be in order, and such actions are hereby solicited. If any points remain in issue which the Examiner feels may be best resolved through a personal or telephone interview, the Examiner is kindly requested to contact the undersigned at the telephone number listed below.

The USPTO is directed and authorized to charge all required fees, except for the Issue Fee and the Publication Fee, to Deposit Account No. 19-4880. Please also credit any overpayments to said Deposit Account.

Respectfully submitted,



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APPENDIX

VERSION WITH MARKINGS TO SHOW CHANGES MADE

IN THE CLAIMS:

Please cancel claims 3, 5, 7-16 without prejudice or disclaimer.

Please amend the following claims:

1. (Amended) A thermal transfer sheet comprising at least an image formation layer disposed on a support, wherein the image formation layer includes an organic pigment having a melting point not less than 310°C; and

a light-heat conversion layer which converts light to heat disposed on a support, wherein the light-heat conversion layer has an absorbance in the near infrared light region of not less than 0.5.

2. (Amended) A thermal transfer sheet according to claim 1, further comprising at least an image formation layer disposed on a support, wherein the heat resistance of the image formation layer according to the DIN 54001 standard is not less than 200°C.

Claims 17-27 are added as new claims.